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U.S. Serial No: 09/230,111
Filed: May 17, 1999
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Please cancel claims 27-76 without disclaimer or prejudice to applicants' right to pursue the subject matter of these claims in a future continuation or divisional application.

Please add new claims 121-141 as follows:

--121. (New) A method of identifying a compound that inhibits specific binding between a signal-transducing protein and a cytoplasmic protein containing the amino acid sequence (G/S/A/E)-L-G-(F/I/L) (SEQ ID NO: 1), wherein each - represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, and each slash within such parentheses separates the alternative amino acids, which comprises:

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- (a) contacting the cytoplasmic protein bound to the signal-transducing protein with a plurality of compounds under conditions permitting binding between a known compound previously shown to be able to (A) (i) displace the signal-transducing protein bound to the cytoplasmic protein and (ii) form a complex with the cytoplasmic protein to which the signal-transducing protein is no longer bound, or (B) (i) displace the cytoplasmic protein bound to the signal-transducing protein and (ii) form a complex with the signal-transducing protein to which the cytoplasmic protein is no longer bound; and
- (b) detecting the displaced signal-transducing protein or the complex from step (a)(A), or the displaced cytoplasmic protein or the complex from step (a)(B),
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wherein the presence of any of the displaced signal-transducing protein, the displaced cytoplasmic protein, the complex between the compound and the cytoplasmic protein, or the complex between the compound and the signal-transducing protein indicates that the compound inhibits specific binding between the signal-transducing protein and the cytoplasmic protein;

wherein the signal-transducing protein is a CD4 receptor, a p75 receptor, a serotonin 2A receptor, a serotonin 2B receptor, a NMDA receptor, or a K⁺ channel; or is a peptide consisting essentially of 3-13 amino acids having at its carboxyl terminus the amino acid sequence (S/T)-X-(V/I/L) (SEQ ID NO: 4), wherein each - represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, each slash within such parentheses separates the alternative amino acids, and the X represents any amino acid which is selected from the group comprising the twenty naturally occurring amino acids.--

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- 122. (New) The method of claim 121, wherein the inhibition of specific binding between the signal-transducing protein and the cytoplasmic protein affects the transcription activity of a reporter gene.--
- 123. (New) The method of claim 122, where in step (b) the displaced signal-transducing protein or the complex is detected by comparing the transcription activity of a reporter gene before and after the contacting with the

compound in step (a), where a change of the activity indicates that the specific binding between the signal-transducing protein and the cytoplasmic protein is inhibited and the signal-transducing protein is displaced.--

--124. (New) The method of claim 122, where in step (b) the displaced cytoplasmic protein or the complex is detected by comparing the transcription activity of a reporter gene before and after the contacting with the compound in step (a), where a change of the activity indicates that the specific binding between the signal-transducing protein and the cytoplasmic protein is inhibited and the cytoplasmic protein is displaced.--

 --125. (New) The method of claim 121, wherein the cytoplasmic protein is bound to a solid support.--

--126. (New) The method of claim 121, wherein the compound is bound to a solid support.--

--127. (New) The method of claim 121, wherein the compound comprises an antibody, an inorganic compound, an organic compound, a peptide, a peptidomimetic compound, a polypeptide or a protein.--

--128. (New) The method of claim 121, wherein the contacting of step (a) is in vitro.--

--129. (New) The method of claim 121, wherein the contacting of step (a) is in vivo.--

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- 130. (New) The method of claim 129, wherein the contacting of step (a) is in a yeast cell.--
 - 131. (New) The method of claim 129, wherein the contacting or step (a) is in a mammalian cell.--
 - 132. (New) The method of claim 121, wherein the signal-transducing protein is a cell surface receptor.--
 - 133. (New) The method of claim 121, wherein the signal-transducing protein is the CD4 receptor.--
 - 134. (New) The method of claim 121, wherein the signal-transducing protein is the p75 receptor.--
 - 135. (New) The method of claim 121, wherein the signal-transducing protein is the serotonin 2A receptor.--
 - 136. (New) The method of claim 121, wherein the signal-transducing protein is the serotonin 2B receptor.--
 - 137. (New) The method of claim 121, wherein the signal-transducing protein is the NMDA receptor.--
 - 138. (New) The method of claim 121, wherein the signal-transducing protein is the K⁺ channel.--
 - 139. (New) The method of claim 121, wherein the signal-transducing protein is a peptide consisting essentially of 3-13 amino acids having at its carboxyl terminus the amino acid sequence (S/T)-X-(V/I/L) (SEQ

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ID NO: 4), wherein each - represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, each slash within such parentheses separates the alternative amino acids, and the X represents any amino acid which is selected from the group comprising the twenty naturally occurring amino acids.--

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--140. (New) The method of claim 121, wherein the cytoplasmic protein contains the amino acid sequence SLGI (SEQ ID NO: 3), wherein each - represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, and each slash within such parentheses separates the alternative amino acids.--

--141. (New) The method of claim 121, wherein the cytoplasmic protein is Fas-associated phosphatase-1.--

REMARKS

Claims 27-76 were pending in the subject application. Claims 38, 39, 47-49, 63, 64, and 71-74 have been withdrawn from consideration by the Examiner as directed to non-elected species. By this amendment, applicants have canceled claims 27-76 without prejudice or disclaimer and added new claims 121-141. Accordingly, upon entry of this Amendment, new claims 121-141 will be pending and under examination.

Applicants maintain that new claims 121-141 raise no issue of new matter. Support new claim 121 may be found *inter alia* in the specification as originally filed at page 12, line 31 to page 13, line 12; page 14, lines 7-12; page 15, line 26 to page 16, line